Subject: RE: WD timer clock patent
Date: [redacted]
From: Paul Cheng <CHENG@icworks.com>
To: Ian Chen <ICHEN@icworks.com>,
"'Laura Engurasoff, Manager of Intellectual Property'" <xle@cypress.com>
CC: Kuang Yu Chen <KCHEN@icworks.com>, "'il@cypress.com'" <il@cypress.com>

Laura,

Attached is the TT106 presentation. It has the simplied flow-chart. Just let me know what we need to do next.

Paul C

-----Original Message-----
From: Ian Chen
Sent: [redacted]
To: 'Laura Engurasoff, Manager of Intellectual Property'
Cc: tjr@cypress.com; adf@cypress.com; Kuang Yu Chen; Paul Cheng; il@cypress.com
Subject: RE: WD timer clock patent

Kuang-Yu Chan and Paul Cheng will be your contacts. Please let me know if you need any other help.
Yes, we should move ahead quickly.

Regards,
Ian

-----Original Message-----
From: Laura Engurasoff, Manager of Intellectual Property
(mailto:xle@cypress.com)
Sent: [redacted]
To: il@cypress.com; ici@cypress.com
Cc: tjr@cypress.com; adf@cypress.com
Subject: WD timer clock patent

Ilbok and Ian:
As per [redacted] instruction at this morning's NPRD, let's get the ball rolling on a patent application directed to a watchdog timer/clock chip. [redacted]
Based on what I saw today, I believe we can prepare the patent application now (without having to wait for any further engineering development). As I said, the flow chart that was in the foils is at least good enough to get the invention approved by the patent committee so we can get started. We can then add a few high level block diagrams to a patent application once it's been approved.
Please have an appropriate person call me and I'll work with him or her to get an invention disclosure form filled out and a presentation crafted for the committee. This patent has the potential to be very valuable to Cypress, and would be well-worth the minimal time (e.g. 1-2 hours) of an inventor or two to get this patent filed. [redacted]

Thanks,
Laura x4755

nprd-TT105.ppt	**Name:** nprd-TT105.ppt **Type:** Microsoft PowerPoint Show (application/vnd.ms-powerpoint) **Encoding:** base64

Specification Summary

- CPU output frequency from 66.6 to 200MHz with =< 1MHz increment
- Capable to support different CPU, AGP, SDRAM and PCI ratio
  - e.g. CPU=133.3, SDRAM=100.0, PCI=33.3
  - and CPU= 133.3, SDRAM=133.3, PCI=33.3
- I2C read support
- Vendor ID and Device ID
- Programmable drive strength for SDRAM and PCI outputs

Features Summary

- **Capable to generate reset output after a frequency change occurred**
  - Recover from system hang after a frequency change
- **Watchdog timer support for system recovery**
  - Capable to generate reset when a time-out occurs
- **Programmable recovery frequency**
  - automatic re-load a pre-programmed recovery frequency once a WD time-out occurs

Application Example